

Listing and Amendments to the Claims

This listing of Claims will replace all previously submitted listings of Claims:

Claims 1-21 (cancelled)

22. (currently amended) A method for processing user requests for credit based wireless local area network (WLAN) access, said method comprising:

an access point of said WLAN receiving a ~~user~~ request from a user device for user access according to an authentication protocol;

said access point forwarding user credentials in response to said request from said user request device;

said access point receiving an access response authenticating said credit-based network access, said access response containing a parameter having a credit value indicative of a length of available continued network access based on remaining user credit;

said access point notifying said user device when said credit parameter reaches a threshold value;

a said user device transmitting a re-authentication request in response to said credit parameter value reaching a threshold value to cause a re-authentication to occur; and

said access point receiving and forwarding user credentials before granting further access to the network by said user device.

23. (previously presented) The method of claim 22, wherein said parameter comprises a session-timeout parameter associated with IEEE 802.1X authentication protocol.

24. (previously presented) The method of claim 22, further comprising said access point receiving a re-authentication response for re-establishing said network access based on said credit parameter value

25. (previously presented) The method of claim 24, wherein the re-authentication response is based on the results of a comparison of said credit parameter value with said threshold value.

26. (previously presented) The method of claim 22, wherein said credit parameter value contained in said access response is based on one of: a) time usage; and b) traffic volume usage.

27. (previously presented) The system of claim 37, wherein said parameter value comprises a session-timeout parameter.

28. (previously presented) The system of claim 38, wherein said authentication server is a RADIUS authentication server, and further wherein said authentication server contains memory for storing said indicator of remaining user credit.

29. (previously presented) The system of claim 38, wherein said parameter value contained in said access response is based on one of: a) time usage; and b) traffic volume usage.

30. (previously presented) The system of claim 38, wherein in response to said re-authentication process, said authentication server retrieves said indicator of remaining user credit and denies re-

authentication of said client device when said indicator of remaining user credit drops below a threshold value.

31. (previously presented) The system of claim 30, wherein the indicator of remaining user credit comprises a credit timer indicative of the remaining credit balance, said credit timer being decremented according to a temporal access usage.

32. (previously presented) The system of claim 30, wherein the authentication server periodically updates the credit timer in units of: a) time and b) traffic volume.

33. (currently amended) A method for processing a user requests request for credit based wireless local area network WLAN access, said method comprising:

an access point receiving user credentials associated with said user request for credit based wireless local area network access;

calculating, in response to said user credentials, a session-timeout parameter value based on remaining user credit and network charges, said session-timeout parameter value indicative of a length of available continued network access;

embedding said session-timeout parameter value in an access response message authenticating said credit based network access;

said access point activating a credit timer having a value indicative of remaining user credit balance, said credit timer decremented according to a temporal access usage;

forwarding said access response message to said access point;

said access point receiving said user credentials from a user in response to a re-authentication request for re-authenticating said credit based network access;

said access point comparing said credit timer value with a predetermined threshold value; and

determining whether said network access is de-authenticated from further network access based on said comparison.

34. (previously presented) The method according to claim 33, further comprising transmitting a de-authentication response message when said credit timer value is below said pre-determined threshold value.

35. (previously presented) The method according to claim 33, further comprising transmitting a re-authentication response message when said credit timer value is above said pre-determined threshold value.

36. (previously presented) The method according to claim 33, wherein said session-timeout parameter value is associated with an IEEE 802.1x authentication protocol.

37. (currently amended) A system for processing a user requests request for credit based wireless local area network access, comprising an access point associated with a said wireless local area network, said access point providing said credit based network access based on authentication according to an authentication protocol, and wherein said access point is responsive to an access response message containing a parameter having a value indicative of remaining user credit, so as to cause said access point to initiate a re-authentication process upon expiration of a timer corresponding to said parameter value by requiring a user associated with a client device to re-provide user credentials to permit re-authentication before one of granting and denying further credit based network access.

38. (currently amended) A system for processing user requests for credit based wireless local area network access, comprising an authentication server, said authentication server being responsive to an

access request message containing user credentials and wherein said authentication server transmits to an access point of said wireless local area network an access response message containing a parameter having a value indicative of a length of available continued network access based on an indicator of remaining user credit so as to cause initiation of a re-authentication process upon expiration of a timer corresponding to said parameter value by requiring a user associated with a client device to re-provide user credentials to permit re-authentication before one of granting and denying further credit based network access.